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Hauptmannia bohdani n. sp. from Poland (Acari: Prostigmata: Erythraeidae)

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ABSTRACT. *Hauptmannia bohdani*, a new species from Poland is described and illustrated.

Key words: acarology, taxonomy, new species, Acari, Prostigmata, Erythraeidae, *Hauptmannia*, Poland.

INTRODUCTION

The genus *Hauptmannia*, based only on larvae, comprises 19 species known from Europe, Africa, Asia and New Guinea (OUDEMANS 1910, WILLMANN 1937, SOUTHCOTT 1948, 1994, SCHWEIZER 1951, KAWASHIMA 1958, SCHWEIZER & BADER 1963, SHIBA 1976, HAITLINGER 1986, 1987a,b,c, 1996, 2002, HAITLINGER & SABOORI 1996, FAIN & COBANOGU 1998). In the genus five species (listed in the diagnosis of *H. bohdani*) are characterized by a comb-like seta on palptarsus. Moreover, from USA was described *Abrolophus welbourni* Yao et al., 2000. with all characters typical for *Hauptmannia*. YAO et al. (2000) suggested that adult genus *Abrolophus* is probably congeneric with larval genus *Hauptmannia*. This opinion has based on GRANDJEAN (1947), WELBOURN & YOUNG (1987) and own observations. No formal synonymization of both names has been proposed hitherto and in this paper I used the name *Hauptmannia* for the new larval species.

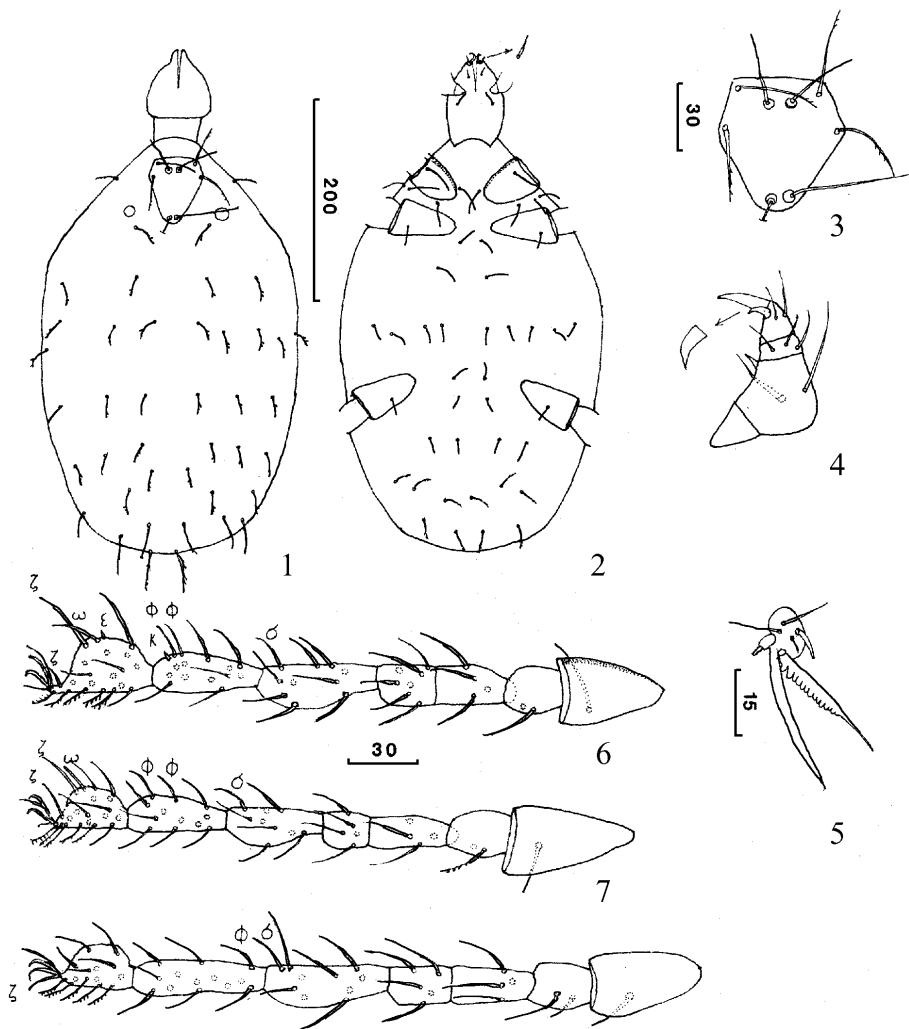
In this paper, a new species of *Hauptmannia* is described from larvae collected on plants. It is the sixth species belonging to the group with a comb-like seta on palptarsus. At present, in Poland 9 species of the genus are known.

The terminology of the structures and setal notation is based on SOUTHCOTT (1994) and HAITLINGER & SABOORI (1996). All measurements were made in micrometres.

***Hauptmannia bohdani* n. sp.**

ETYMOLOGY

The name of the species has been derived from the name Bohdan.



1-8. *Hauptmannia bohdani*: 1 - idiosoma and gnathosoma, dorsal view, 2 - idiosoma and gnathosoma, ventral view, 3 - scutum, 4 - palp, dorsal view, 5 - palptarsus, 6 - leg I, tarsus - coxa, 7 - leg II, tarsus - coxa, 8 - leg III, tarsus - coxa

DIAGNOSIS

H. bohdani n. sp. belongs to the group of *Hauptmannia* bearing a comb-like seta on the palptarsus. In this group it is most similar to *H. longicollis* (OUDEMANS, 1910), *H. pseudolongicollis* HAITLINGER, 1987, *H. humberti* HAITLINGER, 1996, *H. khanjani* HAITLINGER & SABOORI, 1996 and *H. benoni* HAITLINGER, 2002. *H. bohdani* differs from *H. longicollis* in the shorter AW (32-40 vs 42-54), AL (36-52 vs 68-84), PL (32-42 vs 56-64), GL (90-110 vs 162-180), TaI (42-50 vs 66-78) and TiIII (60-68 vs 102-126); from *H. pseudolongicollis* in the shorter PW (36-50 vs 52-60), ISD (38-42 vs 50-56), GL (90-110 vs 146-168), TaI (42-50 vs 60-66) and TiIII (60-68 vs 88-100); from *H. humberti* in the shorter PW (36-50 vs 60-70), S (52-70 vs 90-92), GL (90-110 vs 134-140), TaI (42-50 vs 62-64) and TiIII (60-68 vs 92-104); from *H. benoni* in the shorter GL (90-110 vs 120-140), TaI (42-50 vs 60-70), TiIII (60-68 vs 88-104) and dorsal surface of cheliceral bases without striae; from *H. khanjani* in the shorter GL (90-110 vs 122) and TiIII (60-68 vs 90). *Abrolophus welbourni* YAO et al., 2000 also has characters typical for *Hauptmannia* group with comb-like seta on palptarsus. *H. bohdani* differs from it in longer S (52-70 vs 38-47), shorter PL (32-42 vs 55-67), AW (32-40 vs 54-60) and L (52-60 vs 78-88). See also the key by HAITLINGER (2002).

DESCRIPTION

Larva. Dorsum with ~41 very slightly barbed setae (fig. 1). Setae from posterior part of idiosoma longer than others (24-36, holotype and paratypes 36 - 52). One eye on each side. Dorsal scutum somewhat longer than wide, with 2 pairs of scutalae, both weakly barbed. AL > PL. Two pairs of sensillary setae, both nude. Anterior pair of sensillae (AM) located posteriorly to AL; posterior sensillae near posterior pole of scutum (fig. 3).

Idiosoma ventrally with pair of nude setae (1a) (between coxae I) located near coxae. Between coxae I-II 3 pairs of setae; between coxae II setal pair 2a. Between coxae II-III 10 setae; all above mentioned setae are nude. Between coxae III setal pair 3a; 16 setae posterior to coxae III; setae placed in two last posterior rows are slightly barbed (10 setae). All setae on coxae I-III are nude (fig. 2).

Gnathosoma with hypostomalae scl1, and very short or1 and or2 (fig. 2). Palpfemur with 2 nude setae; it has on border at palptibia sharp-pointed process. Palpgenu with 3 nude setae. Palptibia with 2 nude setae and 1 cone-like seta (i.e. accessory claw) and thick claw (fig. 4). Palptarsus with 7 setae: comb-like seta with very short teeth 30 long (distal part without teeth 8 long), 1 long, relatively thick seta, 3 thin setae, 1 short and thick seta and 1 ω (fig. 5).

Leg lengths: leg I 264 (holotype), 268-304 (paratypes); leg II 260, 248-288; leg III 294, 274-326. Ip=818, 802-912.

Setal formulae: Leg I. Ta 1 ω , 3 ζ , 17 (12N, 5B); Ti 2 ϕ , 1 κ , 12N; Ge 1 σ , 9N; Tf 7N; Bf 4N; Tr 2B; Cx 1N (fig. 6).

Leg II. Ta 1 ω , 2 ζ , 16 (5B, 11N); Ti 2 ϕ , 10N, Ge 1 σ , 8N, Tf 5N, Bf 4N; Tr 2B; Cx 1N (fig. 7).

Leg III. Ta 1 ζ , 14 (5B, 9N), Ti 1 ϕ , 12N, Ge 1 σ , 8N; Tf 5N; Bf 4N; Tr 2?N; Cx 1N (fig. 8).

Table 1. Metric data for *Hauptmannia bohmani* n. sp. H - holotype, P - paratype.

	H	P		H	P
IL	406	406-419	TaI(L)	44	42-50
IW	235	197-266	TaI(H)	20	20-26
L	60	52-60	TiI	44	46-56
W	50	44-54	GeI	52	46-60
AW	34	32-40	TfI	24	24-30
PW	42	36-50	BfI	30	30-38
SBa	8	8-12	TrI	30	26-34
SBp	12	10-12	CxI	40	40-44
ISD	40	38-42	TaII(L)	38	34-42
LX	8	6-8	TaII(H)	18	18-22
AAS	14	12-18	TiII	42	44-52
AP	16	14-20	GeII	46	42-50
AL	36	36-52	TfII	20	18-24
PL	32	34-42	BfII	28	28-36
AM	38	32-48	TrII	32	26-34
S	60	52-70	CxII	54	46-64
DS	28-42	22-52	TaIII(L)	36	36-44
O	8	8-10	TaIII(H)	18	16-20
GL	92	90-110	TiIII	60	56-68
scI	30	24-32	GeIII	52	52-66
1a	32	32-38	TfIII	26	24-30
2a	30	22-32	BfIII	36	28-42
1b	40	38-42	TrIII	34	28-34
2b	24	20-32	CxIII	50	42-54
3b	26	22-28	PsFd	42	40-46
T	22	24-32	PsFv	28	28-38

T - terminala, O - lens.

TYPES

Holotype: POLAND, Strawczyn n. Kielce (voi. Kielce), 4 VIII 2001; 19 paratypes: same locality as holotype; leg. R. Haitlinger (all preserved in Museum of Natural History, Wrocław University).

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